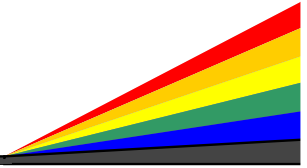


APS COLLOQUIUM SERIES



Speaker: Lance B. Becker
The University of Chicago

Dr. Lance B. Becker is a practicing emergency medicine doctor in the University of Chicago's busy emergency department. He is triple board certified in Internal Medicine, Critical Care Medicine, and Emergency Medicine. His research gained broad recognition for studies in Chicago on survival from cardiac arrest as well as the efficacy of mouth-to-mouth ventilation. His major research now is in the area of cellular resuscitation, free radical production, and mechanisms of ischemia/reperfusion injury. He was selected by the American Heart Association as the Conference Director for the upcoming international Evidence Evaluation Conference that will lead to new CPR guidelines scheduled for publication in the year 2000. He has developed the Emergency Resuscitation Research Center (ERRC) at the University of Chicago and Argonne National Laboratory.

Title: The Hope for Restoring Life after Sudden Death: Cellular Research and Future Therapies

Modern resuscitation, to restore life after sudden death, is a growing field of science that is only about 30 years old. It has developed techniques such as cardiopulmonary resuscitation and defibrillation, which have saved thousands of lives. However, the overall success rate of modern resuscitation is quite low because most patients suffer sudden death outside the hospital. Classic therapies attempt to provide immediate restoration of blood flow and reperfusion with oxygen to the tissues. However, careful measurements of cell death during ischemia (when blood flow has ceased) reveals an interesting paradox: Heart cells don't die during ischemia as expected, but during the first few minutes after blood flow is restored. This observation suggests hope for improved cell survival after ischemia if better methods of rescuing cells can be developed. We have now demonstrated dramatic improvement in cell survival, even after one hour of ischemia, if certain key conditions during the restoration of blood flow are changed.

DATE: Wednesday, July 7, 1999

TIME: 4:15 p.m.

LOCATION: 402 Auditorium